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—THE—
CANADIAN ARCHITECT AND BUILDER,

A Monthly Journal of Modern Constructive Methods,

(With a Weekly Intermediate Edition—The CANADIAN CONTRACT RECORD),

PUBLISHED ON THE THIRD SATURDAY IN EACH MONTH IN THE INTEREST OF
ARCHITECTS, CIVIL AND SANITARY ENGINEERS, PLUMBERS,
DECORATORS, BUILDERS, CONTRACTORS, AND MANU-
FACTURERS OF AND DEALERS IN BUILDING
MATERIALS AND APPLIANCES.

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EDITOR'S ANNOUNCEMENTS.

Contributions of technical value to the persons in whose interests this journal is published, are cordially invited. Subscribers are also requested to forward newspaper clippings or written items of interest from their respective localities.

The Ontario Association of Architects has appointed the "Canadian Architect and Builder" its official paper.

The publisher of the "The Canadian Architect and Builder" desires to ensure the regular and prompt delivery of this Journal to every subscriber, and requests that any cause of complaint in this particular be reported at once to the office of publication. Subscribers who may change their address should also give prompt notice of same, and in doing so, should give both the old and new address.

THE recent heavy rains are said to have caused severe loss to brickmakers in Toronto and its vicinity. A very large proportion of the bricks intended for burning in the second and largest kilns of the season were dissolved into a shapeless mass, and in consequence bricks this season at least are likely to be at a premium.

THE Canadian customs authorities are at present very much exercised in attempting to prevent the importation of an alleged scandalous American newspaper. Might we be allowed to suggest that a matter of greater importance awaits their attention, viz., the method by which the American architect of several large buildings now in course of construction in Canada succeeds in getting his plans for the same into the Dominion without paying duty thereon. The protection which is supposed to be afforded Canadian architects by the tariff will be of no benefit whatever until steps are taken to prevent the wholesale smuggling which for several years past has been carried on under the noses of the customs officers.

DOMINION Government engineers recently visited Montreal and examined the plans, etc., in connection with the proposed scheme for the improvement of the harbor. Their report, which has just been presented to the Minister of Public Works, states that owing to the variable effects of the ice flow—being seldom alike for two consecutive seasons—care should be taken not to rely upon uncertain theories. It is recommended

that careful study should be made of the valuable information obtained under the direction of the Montreal Flood Commission of 1886, and of the action of the ice in the harbor in connection with any projected work of improvement in the upper part of the harbor of Montreal before the Government could be advised to sanction unconditionally the construction of any such work.

WE have several times called attention to the fact that the building by-law of the city of Hamilton as a dead-letter. It provides that within certain defined areas no materials other than iron, stone or brick shall enter into the construction of new buildings or additions to existing structures. Also, that the plans must be submitted to and have the approval of the Building Inspector, on whose permit alone the construction of the building may be undertaken. A few days ago a citizen summoned a neighbor before the courts for having violated the law, when the judge's enquiries elicited the information that although the by-law had been in existence four years, a Building Inspector had never been appointed, and in the absence of the necessary machinery for putting it into operation, structures of every character suited to the tastes of the owners had been going up within the fire limits. Probably as the result of this exposure of the condition of affairs, we are pleased to observe that the city council have appointed a Building Inspector in the person of Mr. Peter Balfour. Under his direction let us hope, a correct record will be kept of the number, character, location and cost of every structure hereafter erected in the city. It is also to be hoped that the construction of no building will be allowed to commence until the plans thereof shall have been approved and a permit granted by the Building Inspector.

IT is, we believe, not generally known that Canadian property owners in these closing years of the nineteenth century are still subject under certain circumstances to provisions of British laws whose enactment is said to date back to the reign of Queen Elizabeth. Such is however the fact, absurd though it may appear. Under one of these old statutes an action was recently brought in the Toronto Courts by the manager of an incorporated company to prevent a neighboring firm from increasing the height of their buildings, on the ground that their doing so would interfere with the side-light which the plaintiffs had enjoyed for a period upwards of twenty years. The plaintiffs claimed to be entitled under the statute in question, to a sky-line at an angle of 45 degrees from their lowest side-light sill. Notwithstanding that the building the height of which it was proposed to increase was separated from them by an open space 40 feet in width, and would in reality have no appreciable effect upon their side-light, they absolutely refused to accept any offers of remuneration for their alleged deprivation, and the defendants were obliged to alter their building in such a way as to comply with the requirements of the statute. Another case to which our attention has been directed is that of a firm who are prevented from building upon the rear portion of their property because the windows of buildings on land adjoining have overlooked and received light from this vacant space for a period of twenty years. An Act recently passed by the Ontario Legislature will for the future

override the provisions of the ancient enactment, but this Act not being retrospective, all persons in the enjoyment of a side-light for twenty years prior to the passing of the Ontario law can enforce by legal process their right to a continuance of the same.

THE Toronto Collegiate Institute Board have invited architects to submit competitive designs for their proposed new building. A glance at the circular issued by the Board to the architects is sufficient to show that nothing but regret and annoyance is likely to be the reward of any architect who may engage in this competition. About the only thing in the way of detailed information afforded by the circular is that "the Property Committee reserves to itself the power of selecting or refusing any or all designs submitted," and "the Board will, if they deem fit, award the sum of \$100 to second best plan, and \$50 to third." The Secretary of the O. A. A. pointed out to the Collegiate Board that if they hoped to enlist the services of the most skillful men in the profession, the conditions would have to be revised in many particulars. The correspondence which took place on the subject has been printed and forwarded to each member of the O. A. A. The chairman of the Collegiate Institute Board promised to have the terms of the competition amended as suggested, in order that they might prove acceptable to the architects, but this was not done, the chairman of the Property Committee to whom the matter was referred, being of the opinion that no changes were necessary, which opinion he supplemented by the impertinent remark that the Ontario Association of Architects apparently wanted the brains of the Board to guide them, whereas the Board desired to get the brain-power and skill of the Ontario Association of Architects. The circumstances would have justified him in adding that the object of the Board was to get the brain-power and skill without paying for it. In the competition, nothing like a detailed statement of the requirements has been given, no expert is to be appointed to judge the plans, and the Board reserves the right to reject all the designs sent in, or "should they see fit," they may award the magnificent amounts of \$100 and \$50 respectively! What a brilliant conception this of justice and the eternal fitness of things, to say nothing of liberality! We might ask the architects of Ontario these questions: "What think you of the estimate placed upon the value of the services you can render? How do you propose to show your appreciation of this estimate? As an architect in another column correctly puts it, it rests with you to say what kind of treatment shall be accorded you. If architects will individually and as a profession resent such unfair treatment, and show their *esprit de corps* by refusing to have anything whatever to do with such unsatisfactory affairs, the building competitions evil, which is steadily growing worse, will soon be remedied. There is another side to this question, and it is that the taxpayers of Toronto will be called upon to pay for the proposed Collegiate Institute building, and have a right to insist that the best design obtainable shall be secured. It is a foregone conclusion, however, that the most skillful architects will not enter the competition, and consequently the probabilities are all opposed to the idea that the design chosen will be the best which might have been had.

THROUGH the mediation of the President of the Toronto Board of Trade, conferences of the parties to the dispute in the building trades in the city have taken place, and have resulted in a settlement. The stonecutters, whose demand was for 45 cents per hour, or an increase of 7 cents per hour, have agreed to accept 43 cents for a period of three years from April 1st; the agreement with the bricklayers is for five years at 35 cents per hour for the first year and 36 cents for the subsequent four years; the laborers are to be paid 20 cents for one year, and 21 cents for four years following; and the stonemasons, 35 cents for two years and 36 cents for three years. A clause in the agreement provides that a conference between the parties thereto shall be held four months prior to its termination to consider all matters as to their future relations. While the entire community will doubtless find in this adjustment of the difficulty, a subject of congratulation, there will come corresponding regret that the strike was not by such a reasonable course of action, entirely

prevented. Had that been done, many building projects would now be under way which under the circumstances have been temporarily if not permanently abandoned; each individual workman would have been from one to two hundred dollars better off than at present; and the business community would not have had to struggle with the difficulties imposed upon it by the withdrawal from circulation of a large amount of money, and the necessity of supplying on credit the necessities of life to the strikers and their families, many of whom, no doubt, as is usual at the close of every winter, were in debt when the strike began. It is but another illustration of the hardship and loss which invariably result from recourse to strike methods.

The present is a fitting time to enquire what course should be adopted for the future in deciding the relationship as to rate of wages, hours of labor, etc., of the employee to his employer. The clause in the agreement just concluded in Toronto which provides that a conference shall be held four months before the agreement expires, is a step in the right direction, and seems to indicate that wiser counsels will hereafter prevail. This is the manner in which we hope to see what is known as the "labor problem" solved. There are other methods by which to solve it, but they are not in keeping with the progress which the world is making in other directions in this nineteenth century. One good suggestion made by one of our correspondents elsewhere is, for the employers to throw the responsibility of refusing to grant an increase of wages upon the proprietors of new buildings. If this were done, public opinion would very soon be brought to bear for the speedy settlement of all strikes. If the demands for increased wages continue to arise, the contractors will have no other course open to them than to charge the extra amount to the cost of the building. This would undoubtedly react seriously upon the welfare of the workmen, and indeed the entire community, by greatly reducing the volume of building operations. It is to be hoped that workmen will perceive that this question has more than one bearing upon their interests, and therefore requires to be looked at from different standpoints. Neither should it be forgotten that conditions in the building trades are subject to change, and the rate of wages which can be paid in an exceptionally prosperous season should not be expected or demanded under reversed conditions. Last year, for example, certain contractors in Toronto required to have so much stonecutting done in a specified time, that they offered to pay seven cents per hour above the union rate of wages. This exceptional circumstance, we are informed, led to the demand being made this year by the stonecutters for an advance to 45 cents per hour—their method of reasoning being that as some contractors paid this figure last year, they were able to pay it for all time to come. The fact that the present season promised to be much less active than last, seems never to have been considered. We point to these circumstances in the hope that such narrow views as too often have marked the past, will not be allowed to prevail in the future, but that recognition will be accorded the fact that the interests of capital and labor are identical.

THE Canadian correspondent of the *American Architect* embodied in one of his recent letters the following statements: "The architects of the Province of Quebec are talking about the formation of a Provincial Association and seeking legislation on the lines of the association of Ontario. A meeting for this purpose was said to be announced to be held in Montreal, but *nothing seems to have come of it*, and indeed what else could one expect when for the last twenty years attempts have been made to draw the architects together but all have failed. The jealousies of Montreal's architects are positively ridiculous. Beginning with the natural dislike that usually exists between 'two of a trade,' this feeling is stimulated into an antipathy in the hearts of one race against the other, and the English speaking and the French are separated by a wide gulf. This natural racial dislike culminates in a general *hatred* of every individual in the profession, and so the formation of an association among such very unethical men is an *impossibility*. The Quebec association, however, very kindly wishes to embrace all the Montreal archi-

pects, but they have stayed proceedings until the Ontario architects' bill should have been passed or thrown out, in order to see what chances they were likely to have of success. Perhaps if the Montreal men get some kind friend to take them by the hand they may be induced to embrace each other." (The italics are ours.)

Most of the statements contained in the above extract are so entirely at variance with the situation at present existing in Quebec, that in justice to the architects of that province, more particularly those of the city of Montreal, we feel it to be a duty to enter our strong protest against them, as well as to expose their "positively ridiculous" misrepresentations. We can assure the profession in Ontario and elsewhere that hatred is not the prevailing sentiment among the architects of Montreal and the province of Quebec; that something *has* come of the efforts being made to form a Provincial association; that the formation of such an association is *not* an impossibility, but at the present moment has been brought to the verge of accomplishment, and this result has been attained by the hearty co-operation of English and French architects. It is doubtless true that jealousies have existed among members of the profession in Montreal, but we would ask the correspondent in question to point to a city where they are unknown. Certainly it cannot be said that Ontario is blameless in this respect. This being the case, why should the architects of Montreal be held up before the world as an example of "unethical men?" Nor does it follow that the existence of jealousies and the failure of past efforts to form an association are sufficient premises upon which to declare the ultimate success of such endeavors impossible. The success which has crowned the efforts of the architects of Ontario is the best possible proof of this. The formation of the Ontario Association of Architects was accomplished in the face of strong local jealousies, and after the failure of several past attempts to secure such a result. The architects of Quebec have no greater difficulties to surmount than those which their brethren in Ontario have overcome, and there is not the slightest room to doubt that equal success will attend their efforts. It is proverbially an unwise thing for people who live in glass houses to cast stones at their neighbors. In view of the results which have followed the formation of the O. A. A. in the direction of promoting good-fellowship among members of the profession, enabling them to work unitedly for the uplifting of the profession and the advancement of their collective and individual interests, the Canadian correspondent of our American contemporary might have made nobler use of his pen had he commended and sought to promote the movement on the part of the architects of Quebec for closer fraternity and the benefits arising therefrom, instead of seeking to widen the gulf which in his imagination at least, exists. We are in a position to know that the sentiments which he has expressed are not shared by the members of the profession in Ontario. On the contrary, anxiety prevails to see the organization of the architects of Quebec accomplished; and any assistance which the Ontario Association through its officers may be able to give, will be cheerfully accorded.

WHAT a specimen of the enlightenment of the present age is our Mechanics' Lien Law! "Unless he signs an agreement to the contrary, every mechanic, machinist, builder, miner, laborer, contractor or any other person doing work upon, or furnishing materials to be used in the construction, alteration or repairs of any building or erection * * * shall, by virtue of being so employed, or furnishing, have a lien for the price of the work, machinery or materials, upon the building * * * and the lands occupied thereby * * *," which being interpreted simply means that, if a contractor owes a workman that he has employed upon a particular building a portion of his wages, or if the contractor has not paid for material supplied to him for a particular building, the workman or the supplier of the material can claim the amount due to him from the owner of the building and enforce payment of his claim from him. Was there ever a more childish law? Was there ever a law which saddled upon an innocent person the responsibilities of liabilities assumed by

a third party, that has not been repealed before this? Surely then, it is time this iniquitous and foolish piece of legislation were taken off the Statutes. How is it possible that such an Act has become law? Its intention is to provide a protection for the workingman against his employer in case his employer turns out to be an unscrupulous man who will defraud him of his wages. But is not this protection guaranteed him by the ordinary process of the law? Why should he need this special protection, and a protection which is a positive fraud upon an innocent person? The law robs Peter to pay Paul—Paul sometimes being a rascal who, because he thinks it is easier to get Peter (the proprietor) to pay him his wages than his "boss," goes and sets the machinery of the law in motion to screw out of Peter money owed him by another person. We might just as well have a bakers' lien law, and allow the baker who makes the bread to come down upon the man who eats it, because the master baker for whom it is made and who sells it has not paid his workman. In a case of this sort the baker's only remedy is to sue his master for his wages. Cannot the mechanic of the building trade do the same thing? Are contractors so notoriously evilly disposed, that the men they employ need special protection? And supposing they are, and that the mechanic must be protected, surely it would be only fair that he should have a lien upon the *contractor's* property—his horse, his cart, or his private goods and chattels. According to the lien law, the lien takes precedence of other claims upon the property or building. According to the law of sales for the recovery of mortgage on chattels, the landlord's claims for rent must first be settled and no doubt it would be easy to assign the right place for a lien holder's claim to come in, and probably directly after the landlord's would but be fair and just; but there should be no power in the hands of a lien holder to enforce a sale to recover his wages immediately he considers them due. A certain time should be allowed the contractor before a lien can be taken out, or put on. As the law stands, directly a man entertains a suspicion that possibly he may not be paid just as soon as he would like to be paid, he goes and claps on a lien, to the excessive annoyance and inconvenience of the owner of the building who, believing everything is going on smoothly about his building and having no cause whatever to think about liens, suddenly finds this "sword of Damocles" suspended over his head. He has already paid the contractor the contract amounts for the material supplied and the labour expended, with the contractor's rightful profit tacked on, and to his bewilderment he finds himself suddenly called upon to pay over again the amount of wages and the costs of material which he has never ordered and knows nothing about, except that as he can see his house has been built. The proprietor's only safety against such a law is, that he shall demand that the contractor who is successful in obtaining the work, shall deposit with him a marked cheque or a bond from responsible men equal to a considerable portion of the cost of materials and labor supplied. The proprietor must protect himself as long as this law exists, and though we should be sorry to see worthy builders hampered, yet when there is such a stringent law for the protection of the employee against the employer, because some employers are not honest men, the good must suffer with the bad. Proprietors and contractors should work together to get this law repealed.

THE Act of Registration of the Ontario Association of Architects, was opposed by some members in the Ontario House on the ground that there was no necessity for it on account of the safety of the public either in respect to loss of life or money. On these grounds some clauses which would have protected the public were struck out and the Act very much emasculated. However, it was thought that an Act that gave a few unimportant privileges was better than no Act, and it was determined by the profession to put it into force. This conclusion was arrived at the more readily, as the committee who had the matter in hand had every reason to believe that before many weeks would pass they would be able to cite an example which would drive home to some at least the fact that it would be advisable, to say the least, that those who professed to be architects should

have some slight knowledge of construction. The few weeks have passed and the example can now be cited, and the lesson which it teaches driven home. What effect it may have we do not know, but of this we are assured that no one will now have the hardihood to claim that no serious loss can result through the lack of constructional knowledge on the part of an architect. It has now become an acknowledged fact that the new Board of Trade building in this city is to all intents and purposes a dangerous structure, and that it will in part have to be reconstructed. Some months ago three stories of an inside wall fell carrying with it two stories more which were below, the whole forming a mass of broken brick and girders in the basement. Fortunately the fall of the walls took place after the workmen had left the building or there would have been a serious loss of life. The accident as it was called (but accident it was not), resulted through overloading the brickwork carrying one end of a double girder. The brickwork was rather inferior, the pad stone was very small, and consequently when a load four or five times what it should have been, was applied, the jamb gave way and let the girders down with the load of brickwork. This portion of wall was not the only one overloaded, a pier 2'3" x 1'10" would have had, if it had not given out, a load of between 80 and 90 tons without the weight of such portion of the roof as would have come upon it. Over 20 tons per square foot was imposed upon brickwork that should not have been loaded over four tons. The furnace chimney, with two large openings in the basement, was built of 9" brickwork from the ground floor to the coping stone, a height of something over 100 feet. The architect not deeming this a sufficiently wonderful feat, actually imposed upon this poor overburdened chimney the additional task of carrying heavy outside walls and a brick vault or square room, and many square feet of floor surface. With this load one would think that only the very best hard brick would be used, but such was not the case, as many soft or medium brick found their way into the work. That cracks resulted and portions of the work fell down is not surprising; it would have been very much more surprising if the cracks had not appeared nor the walls fallen. The building in nearly every part shows a lack of constructional knowledge on the part of the designer that is astonishing. Solids are over voids and voids over solids to an extent that leaves but few portions of the building directly supported in the foundations. Iron columns with heavy loads are placed upon brick walls with small pad stone, and iron girders are placed anywhere and everywhere and loaded without any regard to results. Not one calculation could have been made by the architect during the preparation of the drawings or during the erection of the building, or he would have discovered that he was attempting to do impossible feats in construction. But if the construction of the building was bad in the first instance, the attempts to remedy the mistakes and to make the building safe were simply ludicrous, and did very much more harm than good. What it will cost to make the building a reasonably safe one we do not know, nor are we able to make an approximate estimate of the depreciation in value as the result of the inferior construction. The loss sustained by the Board of Trade may be stated in the following manner: Cost of alterations and improvements necessitated by bad construction, plus depreciation in the value of the building, minus whatever little saving there may have been in erecting the building as it was erected. The loss is a serious one, but the amount of it does not concern us. All that we have to do with is the fact that a building was erected which is now held by those who have knowledge of its defects as being most faulty in its construction, some parts in fact being so faulty that the factor of safety is nothing. It cannot be urged in this case that the same result will not occur again, or that they were exceptional circumstances which brought about this state of affairs. The erection of the building was entrusted to a committee chosen from the council of the Board of Trade. Now the Board of Trade is composed of the most capable business men in the city who should be able to elect a council from among their most capable men. The council one would think would place upon the building committee from among the Board of Trade members those most capable of fulfilling the duties. Notwithstanding that we believe that such was the case, the result is as bad as it well could be. The committee

with all its ability was not able to prevent an incompetent architect from erecting a most faulty building. When such a committee was not able to prevent so ruinous a result, what can reasonably be expected of a committee composed of men of very much inferior abilities and much less experience in such matters, if they should have to do with an incompetent architect? Every circumstance connected with this building has been favorable to a successful conclusion. The competition was one conducted on the most advanced principles—the expert chosen had a wide reputation in the United States for his ability as an expert; the men who were entrusted with the erection of the building were the equals of the most successful business men in the community, and yet when the architects were incompetent the result is disastrous. If matters had been reversed and the architects had been competent and the building committee composed of incompetent men, the building would almost to a certainty have been successful. All of which shows most clearly that it is necessary that there should be some means taken to ensure the competency of every man who professes to be an architect. If the accident which took place at the Board of Trade building had occurred during working hours and several lives had been lost, we should have had the matter most thoroughly investigated. But fortunately as no lives were lost, and although the responsibility is not reduced thereby, no effort has been made to place the responsibility on the proper shoulders, but instead, every effort has been made to keep the matter quiet. No better example could be given of the necessity of an Act to regulate the practice of architecture than the fact that the Board of Trade building, the erection of which was entrusted to business men the equal of any in this city, was constructed without any regard to the well known and accepted laws of stability, as the result of the employment of an incompetent architect.

OUR ILLUSTRATIONS.

THROUGH an oversight, credit was not given to Messrs. Castle & Son, Montreal, the designers of the beautiful memorial window in connection with St. Andrew's Church, Kingston, which was the subject of an illustration in the CANADIAN ARCHITECT AND BUILDER for May. The subject, "St. Andrew Introducing Certain Greeks to Christ," is an original composition, displaying careful study. The colors are a rich ruby, harmonized by greens and blues, with sacred emblems distributed throughout.

THIRD PREMIATED DESIGN FOR CONFEDERATION LIFE ASSOCIATION BUILDINGS, TORONTO—JAMES BALFOUR, ARCHITECT, HAMILTON, ONT.

DESIGN FOR RESIDENCE—J. W. & E. C. HOPKINS, ARCHITECTS, MONTREAL.

CHRIST CHURCH AT MIMICO—GIBSON & SIMPSON, ARCHITECTS, TORONTO.

"CANADIAN ARCHITECT AND BUILDER" COMPETITION FOR FRONT FENCES—DESIGN BY "BROWNIE" (THOS. R. JOHNSTON, TORONTO), AWARDED FIRST POSITION.

TORONTO ARCHITECTURAL SKETCH CLUB.

A HAPPY combination of pleasure and profit formed the programme for the regular meeting on Tuesday, May 27th. An invitation had been received from Mr. Barlow Cumberland to spend the evening at his residence on Wellington street west, where the grand architectural library collected by the late Mr. F. W. Cumberland was to be seen.

Before the departure of the guests light refreshments were served, and the health of the host was drunk. A pleasing diversion was a competition in drawing, corkscrews being the only instruments allowed, and in which some of those present showed a remarkable proficiency.

Possibly wearied with the hard winter's work, the Club relaxed at its closing meeting, Tuesday, June 10th, and devoted the time to lighter pursuits. A capital programme was given by local talent, songs being rendered by Messrs. Herbert Matthews, J. A. Radford, J. J. Woolnough, H. W. Allardyce and J. H. Fawell, the latter doing good service as accompanist on the

guitar. The ever popular ventriloquial sketches were given by Mr. Harry Simpson, while Mr. J. B. William's humorous readings completed the programme.

Owing to lack of response the competitions announced for last month have been postponed, and will be put on the programme for the first meetings in the fall.

During the summer members will have the following outings, when sketching, building inspection and photography will be indulged in, according to the taste of those present:—The start will be from club rooms at 2 p.m. sharp, Saturday, June 28th, July 12th, July 26th, Aug. 9th, Aug. 23rd.

COMMITTEE'S REPORT ON TORONTO ARCHITECTURAL GUILD COMPETITION.

THE Guild offered a prize for the best design for a country church in the style of the Late Decorated Period, and another for an essay on any period of the history of architecture, as a stimulus to students to take up architectural styles as a study. The result has not been satisfactory, and goes to show how little interest apparently students in general take in this important side of their profession. It was not intended that the prize to be offered should strike the mercenary chord in a student's breast, and therefore it was not large, but it was expected that the students would respond to the offer of the Guild and receive the encouragement held out to them. Essay writing is not an easy matter, but no one has made an attempt. Of the designs sent in (only two sets), that of "Tyro" is placed first. The author, who submits four sheets, plan, elevations and sections and one sheet of details, deserves great credit for the study he has given to the subject, and his endeavors to reproduce the principles of the style. There are points about his details which are worthy of special notice. The window tracery is good, placed flush with the walls. The cusping is correctly drawn. As a piece of design, apart from the rest of the building, the west front is very creditable, although his treatment of the upper part of the gable to counteract the drawn up effect of his lofty gable, is somewhat commonplace. The circles are not good, although the intention is well meant. A clerical error is the position of the string course below the projection of the buttress weatherings; it should either form the projection of the weathering itself, or else the projection of the weathering should be omitted when in this connection.

The belfry has a somewhat heavy base, but it is picturesque. The main fault about the exterior is that its proportions are those of an earlier style. The pitch of the roof is far too high, and the wall plates might have been lowered some 6 or 7 feet with effect. Constructionally the roof is not strong, and it is entirely outside the style. The doorway of the main porch is the worst feature of the design—instead of being English at all, it is what the ordinary Philistine would call "Modern"; it is feeble, and its label mould is out of all proportion. But credit is decidedly due to the design of the rose window in the east gable.

Now as to the plan: the general proportions are very good. A fair sized vestry is a very necessary adjunct to a country church where there is no other room provided for small meetings, and so forth. The font is in a correct position near the door, although the minister's step should have been placed where he would face the altar. Some accommodation is lost by the position of the pulpit which, though usually on the left side, might here have judiciously been placed upon the right. A door from the church yard to the organ chamber is quite unnecessary, and not good for the organ. No arrangement seems to have been made for the heating, a matter of the highest importance in this climate, and one which requires careful study. A chimney in a church is a good test of ability in design, and to attend a church without heating apparatus is mortifying to the flesh with a vengeance.

"Notus" has gone in more for outward effect than for either correctness of style or good planning. He has altogether failed to grasp the idea, and submits a design in a poor American modern style. He has produced a picturesque effect, which apart from this competition does him credit, but this was not the requirement. He has made no study of detail, but has incorpor-

ated such work as a village carpenter is usually capable of executing. We would advise him to study good ancient examples rather than the pictures of the *American Architect*.

In plan the church is a failure, quite unsuited to the English church service. There is no chancel except that a portion of the nave is raised as a platform; the sanctuary is a separate edifice, but even here "Notus" has failed. His narrow steps at the Communion Table would be the first detail that would displease the parson. The school room, though not asked for, is well placed, but for the entrance to the church the author has gone to greater expenditure than a village congregation is at all likely to afford, and one which is altogether out of proportion to the effect secured.

"Notus" has provided a large basement, for heating purposes we presume, but with a flue in one of the buttresses and another in the vestry fire-place. We fail to see the utility of the large flue at the back of the vestment closet. It cannot be intended as the bottom of the vestry flue as it is altogether out of place. The roof is heavily timbered and the proportions of the various timbers are carelessly indicated. The form is more suitable for the school house than for the church. Its construction is hidden by a ceiling and is out of style.

"Notus" should study the requirements of his parsons and their congregations before effect.

FRANK DARLING.

R. W. GAMBIER-BOUSFIELD.

S. H. TOWNSEND.

THE SUN LIFE ASSURANCE CO. BUILDING COMPETITION.

TORONTO, May 27, 1890.

Editor CANADIAN ARCHITECT AND BUILDER.

DEAR SIR,—In your issue for this month you have given an illustration of the second premiated design for the Sun Life Assurance buildings in Montreal, sent in in a competition which was settled some months ago, and you have thus afforded those interested in the matter not residing in Montreal, an opportunity of seeing a design that according to the man who examined them was worthy of second place, but which according to the conditions of the competition ought not to have had a place at all. I am not saying that it is a bad plan, or finding fault with the design at all—that is not my purpose here—but what I wish to draw your attention to is the utter disregard of the "conditions" by the so-called "expert" who pronounced upon the designs, thereby inflicting a great injustice upon other competitors and showing how unfair was the decision. After the "conditions" were issued, it was discovered that the person who had calculated the areas of the rooms required, had exceeded the limit of the site, and a circular was sent round to the competitors advising them of this, although no doubt many had discovered the error for themselves, and, like myself, had written to the authorities to ask what they desired to have altered, so as to bring the requirements into the area of the four walls. The answer received was sufficiently satisfactory, but it did not allow of any additional space being taken up on other floors. It simply reduced some of the areas given, and left it for the competitors to arrange as they best could. Now a binding clause was that the "Board room," "two agents' rooms," "lunch room" and two additional rooms and lavatory, etc., should be on the second floor, but should occupy only a part of it, and that the *rear part* should be entirely separated from the front part of this floor by a solid wall, and having communication only with the floor below, upon which were the main offices of the company.

This particular condition was the one that caused most men the principal difficulty in arranging the plan, and had we all done as the author of the second premiated design has done and ignored this condition altogether, the planning would have been far easier. But because he has either overlooked this condition or been unable to make a place in conformity with it, Mr. Knox (whom I understand was the "expert"), thinks he is entitled to the prize. Surely this is very scandalous. You will readily understand that it must be far easier to get a certain number of rooms of given sizes, which sizes together are in excess of the given area of the site, into two floors than into one and a half floors, which was a stipulation. If you have got two boxes, and

you are desired to fill up half of one of them with sawdust, and then you are told to fill the other box with eggs and to put into the unoccupied half of the first box more eggs than you can get in without breaking them, what would you do? The first thing that would occur to you no doubt would be to violate the condition and take out the saw dust and take the whole box for your eggs, and this is what the second prize man has done, but others who thought it out came to the conclusion that it would be wiser to get eggs of a slightly smaller diameter, and so succeeded in getting in the correct number without violating the conditions or materially changing the requirements. But our friend Knox thinks the man who takes out the sawdust has done the cleverest thing. The sawdust in this case represents office space from which the company were desirous of obtaining a rental.

It is to be doubted whether good planning was or was not one of the points on which Mr. Knox based his opinion, and it may be said that such things as w. c.'s and ladies cloak rooms are not of such importance as other requirements, but still I venture to suggest that such unmentionable places require some consideration. I may be allowed to direct the attention of Mr. Knox to the fact that in the design in question the w. c.'s for the use of the lady clerks of the company open directly out of the general office for the male clerks, and directly at the foot of the stairs leading up to the male clerks' lavatories, board room, directors' room, lunch room, store room, and so on. It would be well for architects who know that ladies like a little privacy, to see that their plans will be examined in future by some one who knows this much at any rate. As I have said it is not my intention here to criticize the general arrangement of the plan, I will not take up any more of your space.

Yours very truly,

"A KICKER."

TORONTO COLLEGIATE INSTITUTE BUILDING COMPETITION.

TORONTO, June 11th, 1890.

Editor CANADIAN ARCHITECT AND BUILDER.

SIR:—Though not a funny man, I have been more amused than perhaps most of the architects who have read the printed correspondence received by us yesterday, re Collegiate Institute competition, because I can say "I told you so!"

Our young and "impertinent" Association has received such a rebuff as, I trust, may never be mine as an individual to experience, though as individuals, each member of the O. A. A. is no doubt suffering under the indignity, and reaching around to kick somebody. Now let us kick the right party.

If in a brawl I get a knock down, I am likely to feel hurt, but might I not have remained elsewhere? If we don't like this treatment, the remedy is in our own hands. Let us discourage the practice of architectural competitions altogether. For some years I have done my little part in that direction, and shall so continue. Some say, "they have done good," and that it "gives the young men a chance"; others, that "contractors have to compete, why not architects?" I cannot see the parallel. Do we invite carpenters to set up the framework of a row of cottages that we may select the strongest and employ its framer to complete one? Does a speculator, wishing to cut a farm up into building lots, invite surveyors to take measurements and notes, showing the greatest frontage each can make of it, that one may be employed to make a plan of it? Or in litigation, do we invite lawyers to send in briefs that we may select the most likely and employ its compiler to conduct our case? the rejected ones in each competition not even getting "thank you." Only in this light can I regard the too common advertisements addressed to architects. Are we so simple as to obey such bidding? Then do we deserve the treatment we receive. Our employment demands the most painstaking attention and the strictest integrity. Why, then, are we treated with suspicion and contempt? Our capabilities, preparation, experience and responsibilities must equal those required in any profession, then why not assume the dignity and command the respect? What other class of men would have begged of a school board the privilege of giving a month's labor gratis, or would have been treated to such gratuitous insult?

I am far from being wealthy, nor am I overburdened with commissions, especially this season, but, sir, what little business I am entrusted with I propose to do on business principles; my fees understood and payment assured—then my clients' interests receive my best attention, and I have preserved my self respect.

I may scarcely hope to have a seconder, but beg to record my humble conviction that the more creditable and profitable course for the O. A. A. would be to declare collectively and individually against any and all architects' competitions in this or any country. It is good practice for students, but should be dropped on entering business life.

Let an architect be engaged on the strength of his known or supposed ability and integrity; let him work up a practice and reputation as other professional men do, and when competitive designs cease to go a begging, he will be sought after and respected. Let a school board, as would an individual, employ whom they choose, and when he is not wasting his time and talents over competitions, he will be able to design quite as creditably and more satisfactorily to his clients, when enjoying their confidence, than as a stranger and without prospect of remuneration. An incompetent man may sometimes be selected, but can matters be any worse than at present? Competitions are always unsatisfactory to the greater number interested, and because unbusinesslike in principle, always will be. In the hope that this latest example may be an eye opener, I remain,

Yours truly,

M. B. AYLSWORTH.

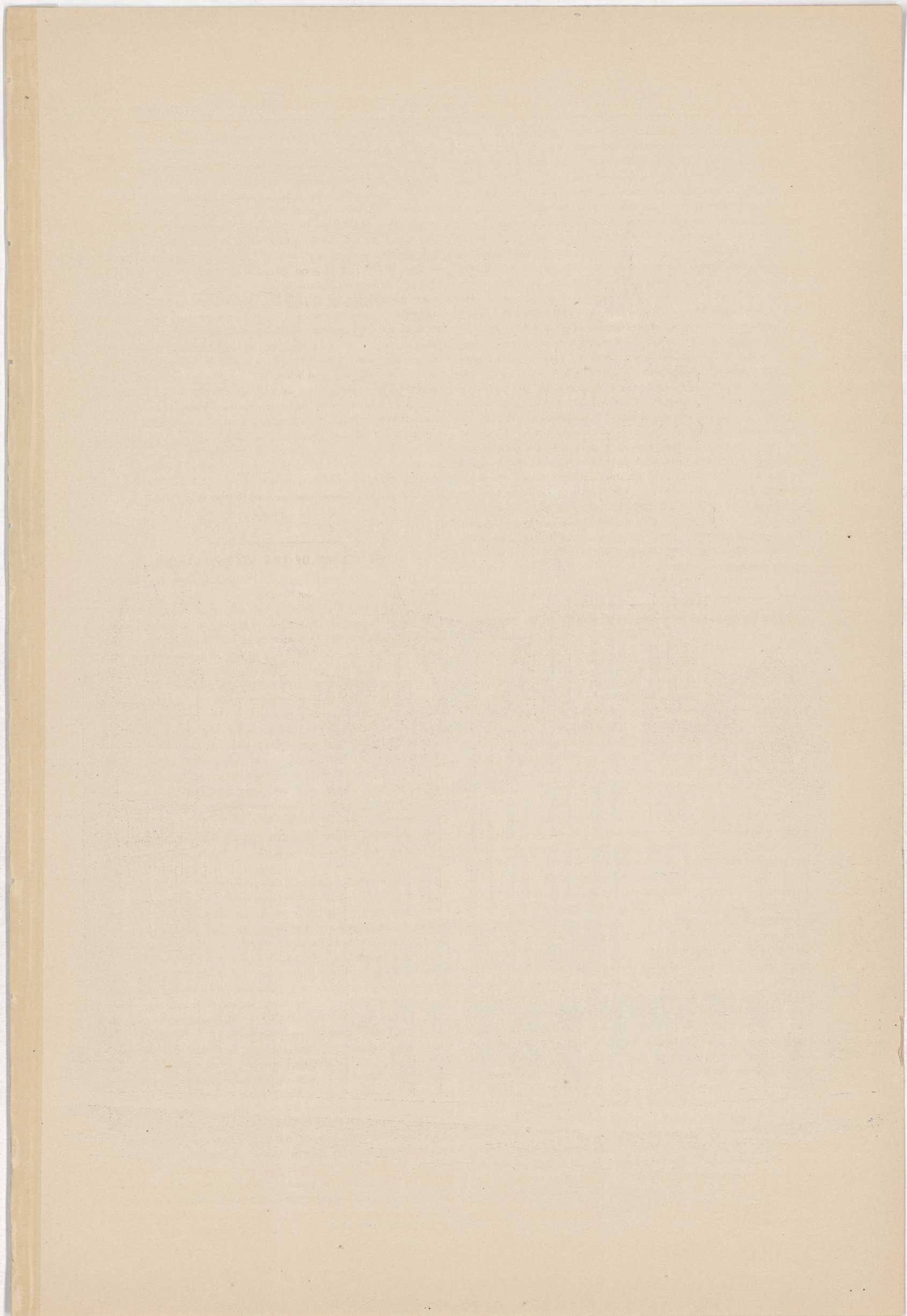
THE LESSON OF THE RECENT STRIKE.

TORONTO, June 9th, 1890.

Editor CANADIAN ARCHITECT AND BUILDER.

SO our workingmen have at last seen fit to bring the recent labor dispute to an end by accepting a compromise with the master builders. The men have had it almost their own way, but their long idleness has shown them the folly of their ways, and the terms of the agreement that settles the wages of the next five years, shows only too plainly that they do not care about another strike just yet. But why did our master builders come to an agreement like this at all? Was it for the sake of peace, or was it that they could not hold out longer? Here is a case in which our men were getting fair wages; there was no prospect of a kind that could in any way justify a demand for increased wages, yet they determine by joint action to enforce such a demand. They will not listen to reason, but with the childish freak that has become their custom when they cannot get what they want, they refuse to work.

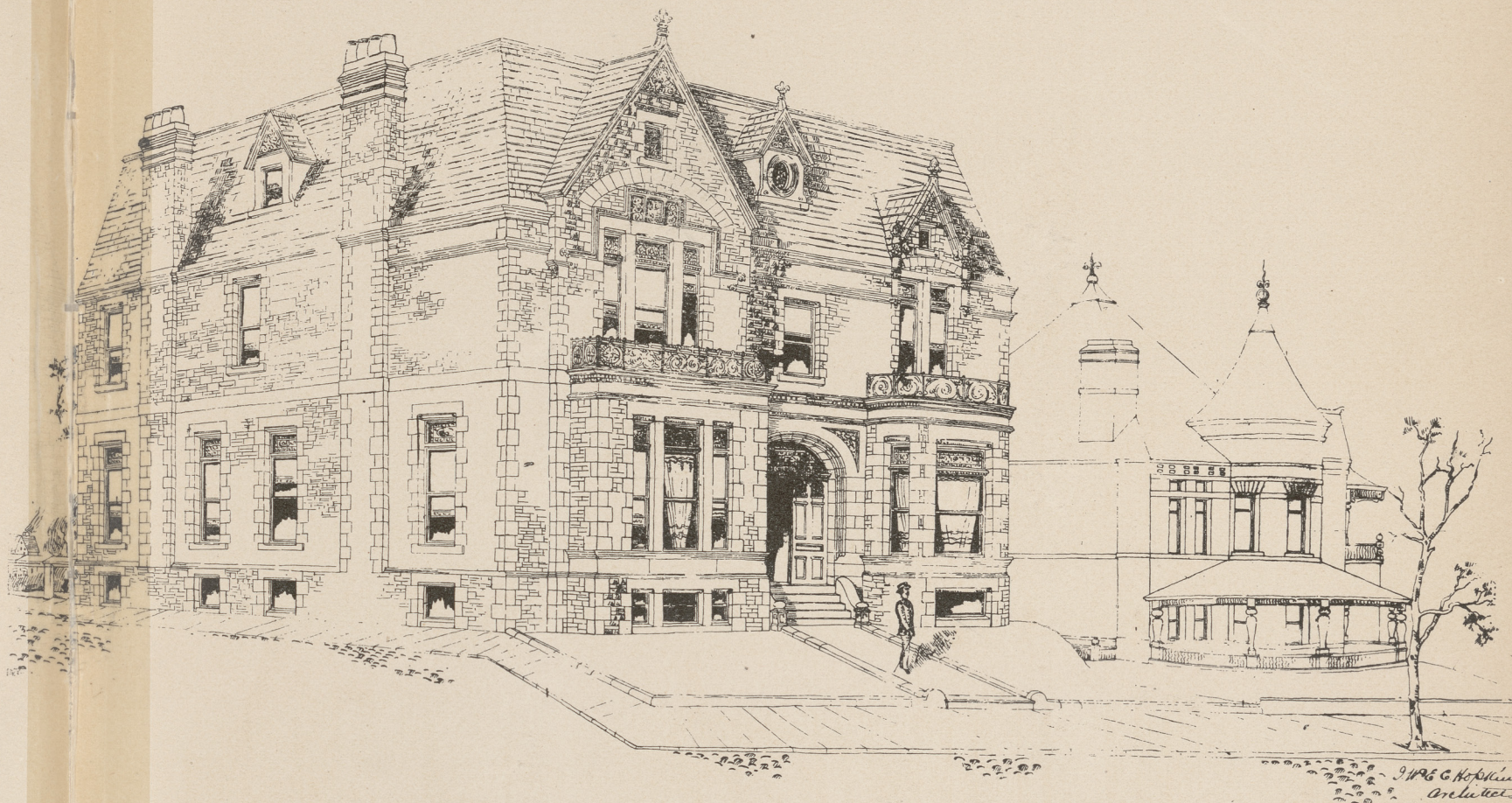
But we raised the question why did the master builders give in? and we will ask another question: What have the master builders got to do with the matter at all? Certainly the men are employed by the masters, but in a different way from that sense in which a private individual employs a domestic servant. Here the master of the house says what wages he will pay, and if the servant does not like them, she goes somewhere else. But the workmen have banded together, and the question is not as between master and servant but as between (as they are so fond of saying) capital and labor. It is *not* then a dispute between master builders and workmen, but between workmen and the *proprietors*. By the enforcement of higher and stated rates of wages it is not the contractor who is affected (except so far as existing contracts are concerned)—it is the public—the public who pay the workmen through the contractor, the agent of the public. In the dispute between "labor and capital," the proprietors—the public—who represent the capital—keep out of the way; they leave the builder to fight it out, and when he can no longer hold out because they are themselves pressing him, he gives in—the result of being between two fires—and the public are content, and see not that it is they who are beaten. Of course the masters give in; were we a master builder, we would not hold out an hour against a demand for increased wages by these cowardly unions. Why should we be made to bear the brunt of opposing them when it's no concern of ours? No, if the public will not back up the masters against exorbitant demands, let the masters give in and let the public pay whatever





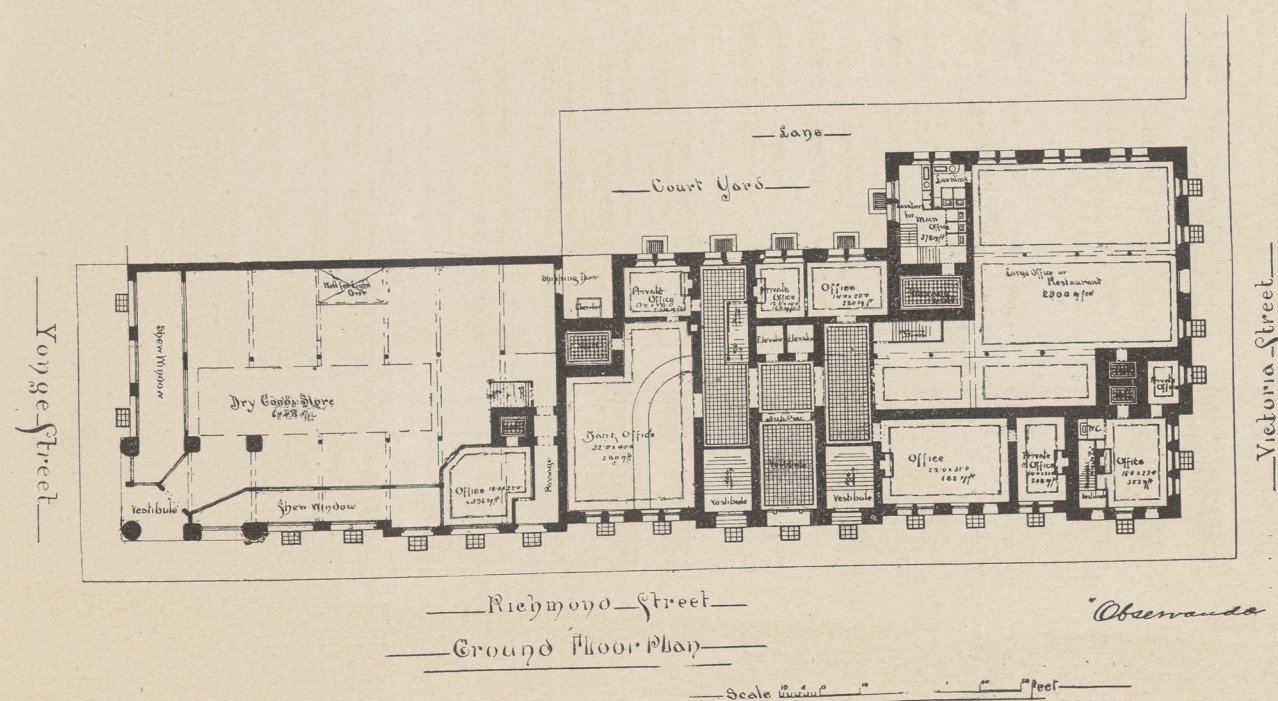
THIRD PREMIATED DESIGN FOR CONFEDERATION LIFE ASSOCIATION BUILDING, TORONTO, ONT.

MR. JAMES BALFOUR, ARCHITECT, HAMILTON, ONT.

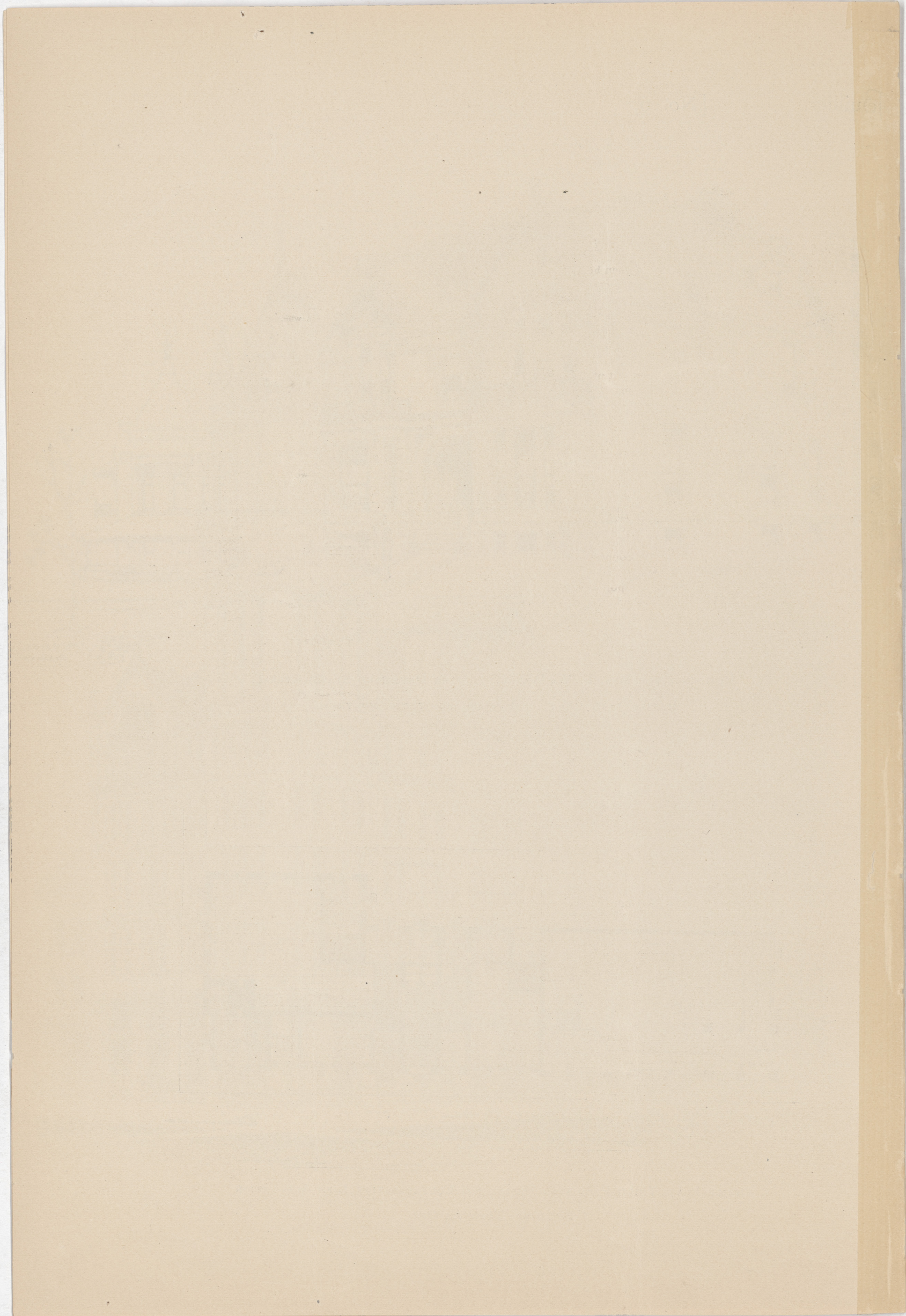


RESIDENCE FOR MRS. F. W. WANKLYN, UPPER DRUMMOND ST., MONTREAL.

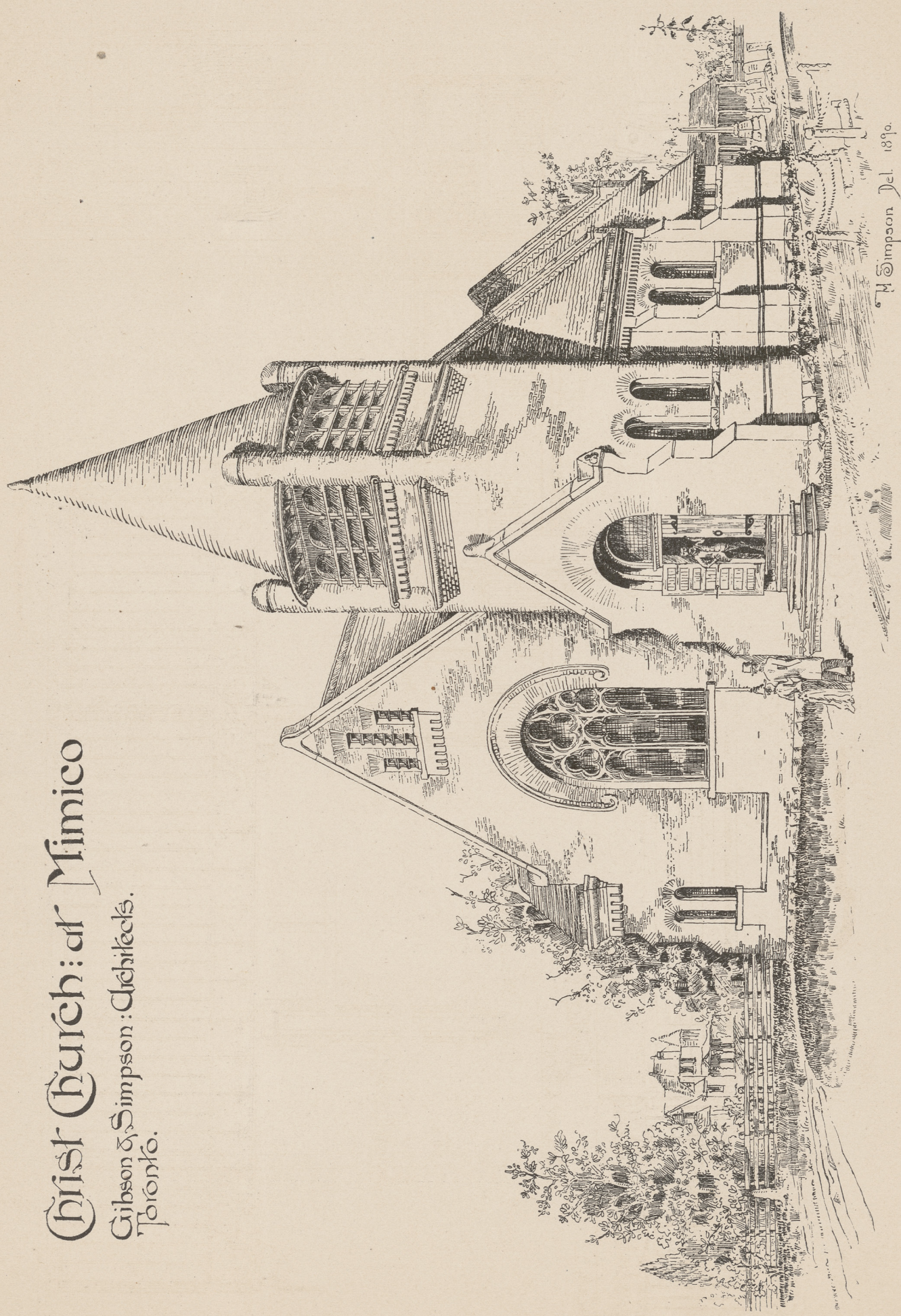
MESSRS. J. W. AND E. C. HOPKINS, ARCHITECTS, MONTREAL.

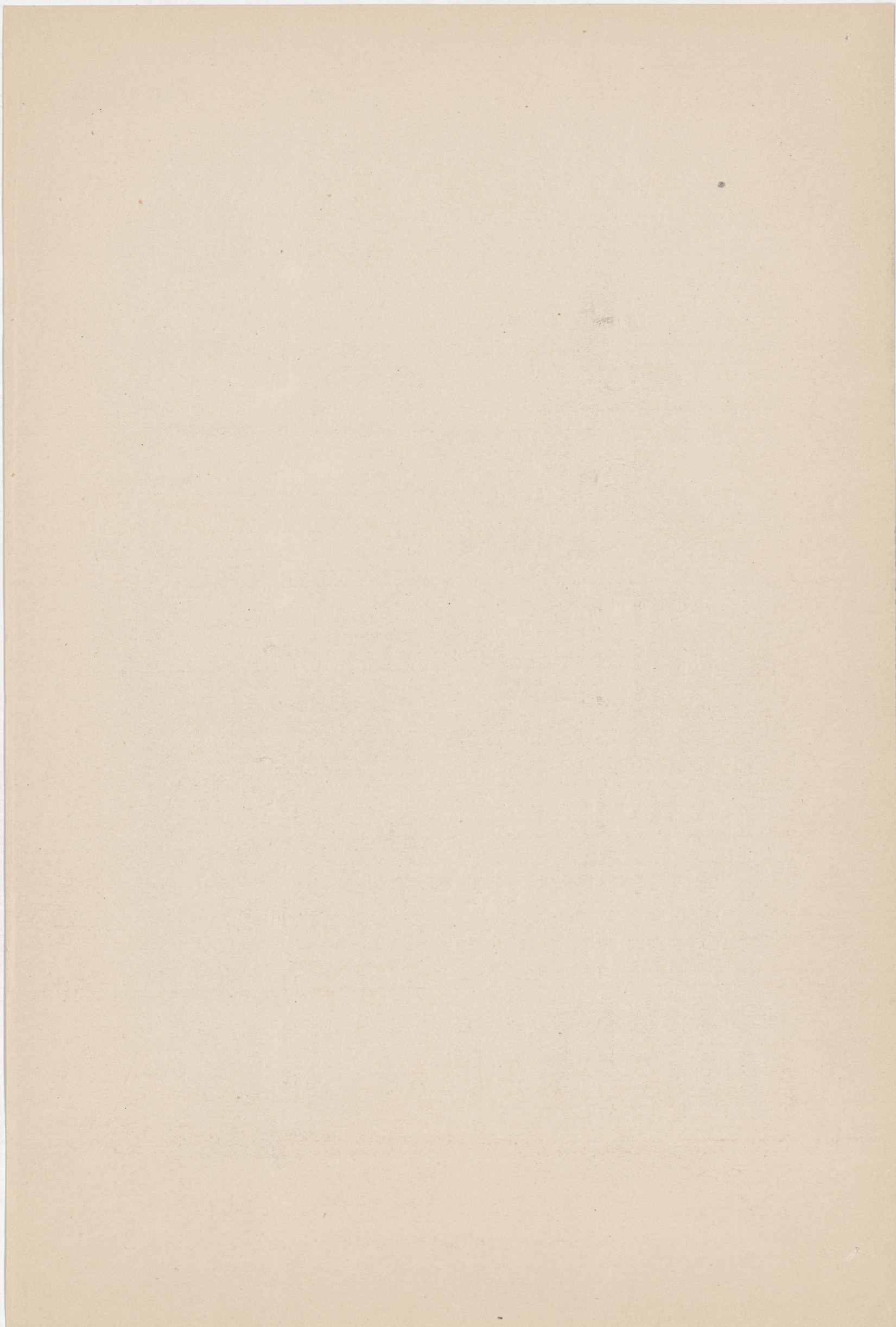


OFFICE PLAN, THIRD PREMIATED DESIGN FOR CONFEDERATION LIFE ASSOCIATION
BUILDING, TORONTO, ONT.



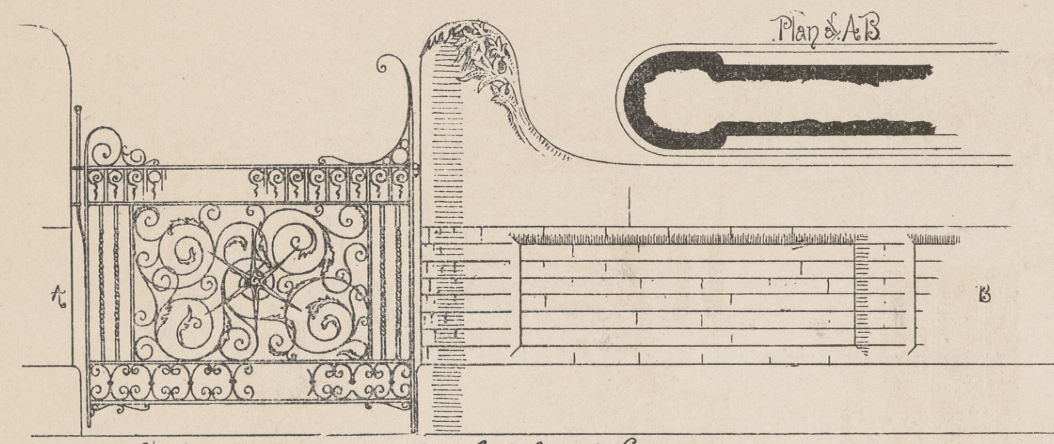
Christ Church: at Mimico
Gibson & Simpson: Architects.
Toronto.





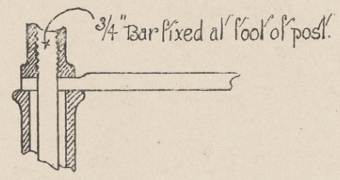
C. C. & B. Competition. No. 7.

Three Designs for Front Fence
By "BROWNIE"

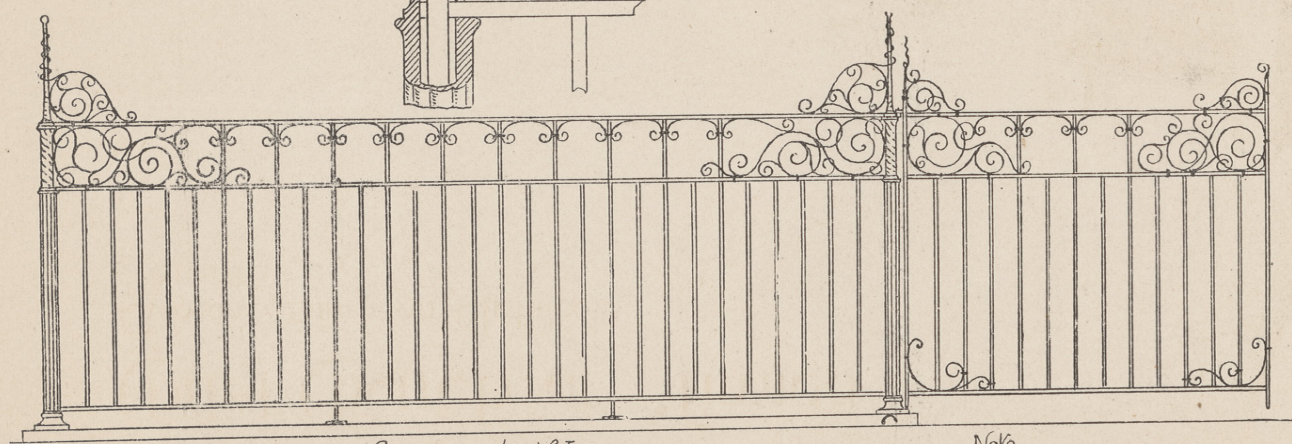


Scale $\frac{3}{4}" = 1'$

Elevation of fence.
Stone & Brick

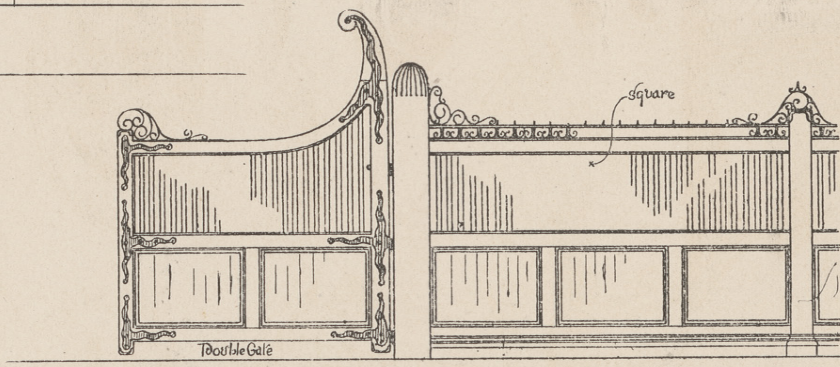


Section through Post



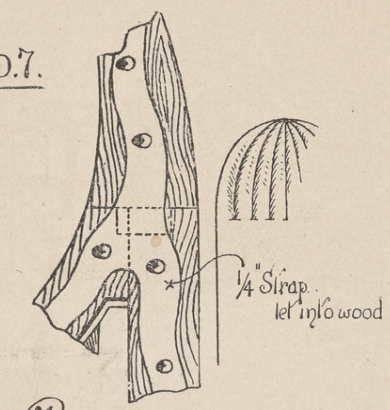
Scale $\frac{3}{4}" = 1'$

Fence of Wro't Iron.

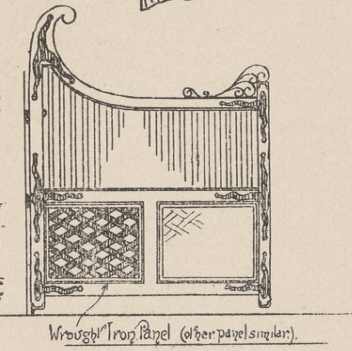


Scale $\frac{1}{2}" = 1'$

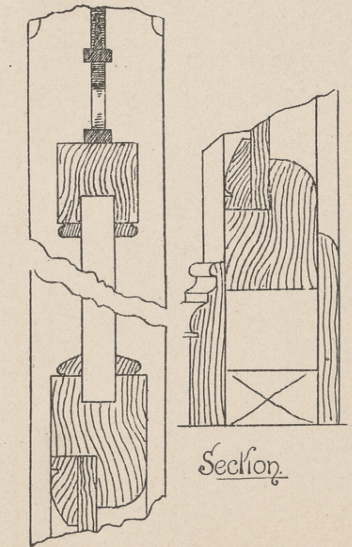
Fence of Wood
With wrought iron fillings.



$\frac{1}{4}"$ Strap
let into wood

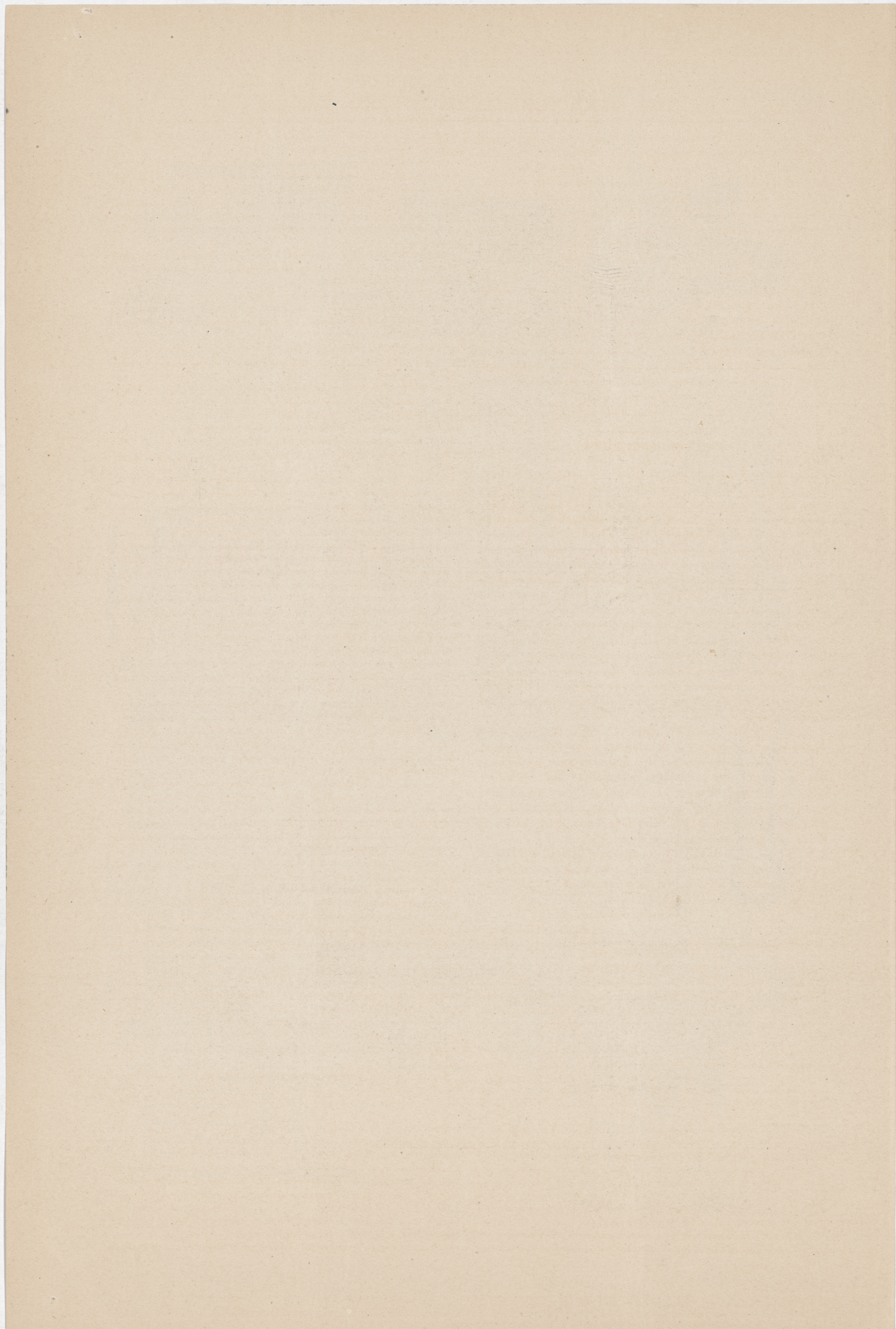


Wrought Iron Gate (other panels similar).



Section

Note.
Double gates similar to single.



they are asked if they do not see fit to make a stand against it. While the workmen remain in their present condition (the obedient slaves of the unions), it becomes cowardly for a proprietor to insist that a builder should complete his contract. Our poor workingman, led like a tame bull with a ring in his nose by a scheming adventurer who is gradually sucking his blood and becoming wealthy in the process, refuses, at his order, to do a stroke of work until he is promised higher pay. Very well, that is the position, if we will look at it correctly. The master builder does wrong when he says "All right, do what you like, I will not pay you a cent more!" He should turn to his employer and say, "will you pay the increased demand?" and if the terms of his contract do not admit of his asking the question, he should see that in future they do. If the proprietors collectively say "No!" the work stops—stops till the unions are forced to give in, stops till their power is gone. Then let the workingman be raised out of his slavery, and, when fit as a man, let him be treated as man.

Respectfully yours,

FAIR PLAY.

BUILDING CONTRACTS.

Editor CANADIAN ARCHITECT AND BUILDER.

DEAR SIR,—The following is, I believe, contained in nearly all the contracts between contractors and owners that I have seen, and the blank contract from which I have taken same has a statement at the top thereof that the contract is approved by the architects and builders of Toronto, namely: "The proprietor shall pay the contractor in manner following:—eighty per cent. to be paid by the proprietor on account of the contract, and all additional works, as the work shall proceed, on the value of the same, which value shall be in proportion to the amount to be paid for the whole of the works and additional works, the balance of the contract and all extras to be paid within thirty days from the completion of the said works, and after the contractor shall have rendered to the architect a statement of balance due to him. *And it is further understood that in case of several contractors being employed on the works, no trade is to be considered complete till the other several contracts are also completed.*" The italics are mine.

It has always been to me a matter of surprise that contractors would consent to a clause in the contract such as above quoted.

It seems to me that it might be a matter of great hardship to contractors for the stonework, excavating and brickwork, and even many of the other contractors that they should have to remain out of twenty per cent. of what was due them until after the last work had been done upon the building, which in the case of large buildings might mean years.

I am not, sir, writing for the purpose of having any dispute with any person, but should be pleased to see a controversy on this question, so that if it be a fair clause to have in the contract all may understand why.

I have the honor to be, etc.,

FRANK DENTON.

TORONTO, June 6th, 1890.

ROT IN TIMBER.

ONE of the questions of the day in the building world is, "How to preserve timber incorporated in buildings from decay." There are many systems as there are many causes, and as the cause varies in every instance, so often this or that system of cure is at fault, when applied to a particular case.

Decay in timber usually occurs from exposure to alternate wet and dry atmospheres, but the rot which causes us so much trouble is produced where the atmosphere does not change much. This rot is of two kinds, generally known as "wet rot" and "dry rot." Wet rot shows itself where, in the case of wood being imperfectly seasoned, gases form in the wood, but owing to ventilation they are able to escape. Dry rot, on the contrary, is the result of the same gases, which being unable to escape owing to want of ventilation, remain on the surface of the wood and form a fungus very difficult to get rid of, and very contagious in its nature.

Wet rot will occur in a growing tree, but if the wood be thoroughly well seasoned the rot may be prevented from appearing in the converted wood when built into a building by painting or carefully sheltering it. The disease of wet rot is not spread except by actual contact, whereas dry rot spreads by dissemination of the germ of the fungus.

Air confined and without much moisture encourages the growth of the fungus, which eats into the wood. Warm, damp and stagnant air are sure

to produce dry rot, while the simple want of sufficient ventilation will be cause of rot in one form or another.

Dry rot usually appears in the flooring beneath which there is either no ventilation, or where, with little ventilation existing below, fires are kept burning above, as by this means moisture is drawn up from the soil.

Ends of timbers built into walls are nearly sure to be affected by dry rot, unless they are protected by iron shoes, or lead or zinc. The same result is produced when joinery or other woodwork is secured to walls before they are dry.

Shavings left under floor boards are a sure cause of dry rot, and painting or tarring unseasoned wood is an injurious custom as it only shuts in the gases and dry rot is the result.

When once dry rot gets a firm hold in a building it is very hard to remove it entirely. Like fever germs, so the germs of the rot are carried about and fasten on walls or other timbers where they germinate to the destruction of the material.

Of the ordinary remedies, the first is a sweeping one, but often, and in fact more often than not, the only actual cure: Substitute new timbers, brickwork or other material, for the affected parts, and carefully clean away every particle of the fungus; afterwards apply a wash as mentioned below.

Coal tar, or a weak solution of vitriolic acid with water is most effective, and pyroligneous acid is also very good. Sometimes a solution of corrosive sublimate, an ounce to a gallon of hot water, or a solution of sulphate of copper, half a pound to a gallon of hot water, will prevent the spread. But where rot occurs from want of ventilation, nothing short of supplying air will be effective.

So much for cure, now a few words on prevention. In a paper on "The Preservation of Timber" read at the annual meeting of the American Association for the Advancement of Science held a few months ago in Toronto, four methods were mentioned as having proved successful: (a) "Kyanizing" (so called from the name "Kyan" of the inventor), or preserving wood with corrosive sublimate (bichloride of mercury); (b) "Copperizing"—Margary's process—soaking the timber in sulphate of copper; (c) "Burnettizing" (Sir W. Burnett) steeping in chloride of zinc; (d) "Creosoting" with dead coal tar—this is known as "Bethel's" process.

The first two methods are gradually falling into disuse, and of the latter, creosoting is the most effective. But it was stated that cross grained woods, such as white oak and chesnut, should not be treated at all. The more porous woods, such as hemlock, bastard pine and beech, take the treatment well, and as a result last twice as long as when without it.

Creosoting is effected by extracting the moisture and air from the tubes of the timber, and then forcing in kreasote (oil of tar), commonly called "creosote," at a high pressure. The timber after being dried is placed in a closed wrought iron cylinder. The air is extracted from the cylinder and from the timber within it by means of a pump. Creosote at a temperature of 120° is forced into the cylinder and penetrates the wood under a pressure of 170 lbs. to the square inch. Creosote must be thick, rich in naphthaline and free from ammonia. The amount of creosote pumped in depends upon the nature of the wood and the purpose for which it is intended. Sapwood absorbs more than the heartwood. Fir and other softwood will take from 10 lbs. to 12 lbs. per cubic foot, while oak and other hardwoods will take little more than from 3 lbs. to 4 lbs. per cubic foot. For softwoods a form of this process may be applied by simply heating or drying the timber over fires, and placing it while warm in hot creosote; but the timber must under all circumstances be seasoned first.

The effect of creosote is that it coagulates the albumen of the wood, fills up the pores with an oily liquid, destroys insects and fungi and repels worms, excludes moisture and prevents dry rot.

A principal cause of dry rot is constantly employed by builders—so common is it that one might almost think they consider dry rot an advantage to a building rather than otherwise. A carpenter finishes up the boarding of a roof and leaves it exposed to all weather until the roofer is ready to go on with his work. Rain falls, and the boards are soaked and water runs and drips inside; then before the boards have had time to dry, the roofer comes and lays on his roofing felt, and on the top of this puts his slates. We have often seen the woodwork of roofs under a foot of snow, and the roofer sweeping off the snow to lay his felt, utterly regardless of the result. Once this is done there is no ventilation, and dry rot will be the result. First to save the expense of covering the woodwork with a tarpauline the proprietor runs the risk of having to reconstruct his roof at no very future date.

As to the danger of dry rot, a few examples will show how carefully timber should be examined. A building begun and carried up to the second storey floor beams, was left unfinished and exposed to all weather for four years. The floor beams were of 18" x 14" sawn, reversed and bolted, each trussed with a piece of oak 4" x 3"; the ends rested on stone templates and were built into the wall in mortar. There was very little to indicate decay externally, but the centre of each was proved to be quite rotten, sometimes for a length of 4 ft. or 5 ft., sometimes the whole beam, and the oak in all cases was more decayed than the deal. The fungus appeared on the surface like a fine cobweb, the ramifications branching out in all directions of a cream white and dark brown color. The fungus had spread through the brick walls so that much brickwork had to be removed. The only effectual cure was the removal of all the affected material.

Dry rot appeared in a beam that gave support to a brick wall over an

opening in the basement of a house. The reason was, probably, because his corner of the basement was badly ventilated, and in addition to this it was near the kitchen fire above, so that moisture was drawn in and rested on the beam. Various methods of removing the fungus were tried but it always made its appearance again, so that ultimately the beam was taken out and replaced with an iron girder.

Dry rot is sometimes only to be detected by its sickly smell, and in one case in particular where to all appearances the wood was sound, but where the smell had been noticed, it was found that the joinery was quite rotten beneath a skin of paint that covered it, and the floorboards had rotted from below, up to within $\frac{1}{8}$ of an inch of the upper surface. Want of ventilation of the space under the floor was the cause.

QUEBEC.

(Correspondence of the CANADIAN ARCHITECT AND BUILDER.)

THE ladies of the "Hotel Dieu" having decided upon the erection of new hospital buildings, some time ago commissioned Mr. E. Tanguay, architect, to visit Paris to examine several of the most important hospitals in that city with a view of applying the experience thus obtained in the construction of their new buildings here. Mr. Tanguay subsequently prepared plans and the work has now been contracted for and the buildings commenced. The entire cost will be in the neighborhood of \$115,000, accommodation being provided for about 120 beds. It is expected that these buildings will form the basis for a model hospital, every pains being taken to have them erected in accordance with the most advanced ideas of what a perfect hospital should be. Mr. Thos. Pampalon is the contractor for masonry works and Mr. E. St. Pierre for carpentry works.

Mr. Tanguay is also charged with the improvements now being made to the venerable Basilica. Some exterior work is to be done, but the improvements mainly consist of interior decoration, including several stained glass windows. A steam heating apparatus is also being constructed by Messrs. Picard & Son. The cost of the whole will be about \$20,000.

The interior of St. Alban's church is also being completed from Mr. Tanguay's designs, at a cost of about \$15,000.

The parish church of Beauport, which was destroyed by fire about three months ago, is now being rebuilt. It was one of the very few examples of pointed architecture to be seen among the Roman Catholic churches of this part of the Province of Quebec. In addition to the original church a narthex is to be built to the west front with tower and spire at either end, the whole to be constructed of the local limestone with Deschambault stone trimmings. Mr. F. X. Berlinguet is the architect employed on the work. Your correspondent has not heard the estimated amount of expenditure, but assumes cost will be upwards of \$75,000.

The new hotel project still hangs fire. Plans were submitted at a recent meeting by Messrs. H. Stavely, Quebec, and G. F. Stalker, Ottawa, who had jointly prepared the same. Plans were also submitted by Messrs. Rotch & Tilden, of Boston. As yet no decision has been arrived at. Both sets of plans were publicly exhibited at the Exchange; large numbers of our citizens examined them, each plan having its admirers. Further comment would be out of place at the present stage.

MONTREAL.

(Correspondence of the CANADIAN ARCHITECT AND BUILDER.)

NO contracts of any importance have been let since my last writing, except perhaps the Sun Life, the stonework of which has been awarded to Peter Lyall and woodwork to Robert Beckham. The plans for the Victoria Hospital, as I mentioned last month, have been remodelled and the two lowest tenderers in each trade asked to compete again.

ALLEGED BOODLE CONTRACTORS.

There is quite a degree of excitement among politicians over what are called the "Whelan-Pacaud" boodle transactions arising over the contracts for the Quebec Court House. The building was originally contracted for something under two hundred thousand dollars, and has already cost the province, I hear, close upon a million dollars. Mr. Whelan, one of the contractors, acknowledges having paid large sums of money to certain gentlemen in order to get his estimates passed through Parliament, and in fact: has openly stated so through the press, the result being that a royal commission composed of two lawyers, one from Quebec and one from Montreal, has been appointed to examine into "one particular charge." One meeting has been already held, and the commissioners are shortly to proceed with the evidence of Mr. Whelan. It is doubtful if any satisfactory information will arise out of the enquiry, as one of the witnesses is reported as having stated that he will risk being put in jail rather than give the names of the parties to whom he paid money. It seems too bad that we can not get things done in an honest and honorable way in any contracts where politicians are interested. All contractors generally complain of having been bled. I cannot for my part see where the money charged to the construction of the Quebec Court House can possibly have gone unless there was a leak somewhere. I am sure if done in a private office it would not have cost one half the amount stated. It would be very interesting to have a bill of quantities of the material used in the construction of this building, together with the current prices for similar work and those actually paid the contractors.

HARBOR IMPROVEMENT.

Two of the Government engineers appointed to examine the report on plan No. 6, have visited the city during the month and made an examina-

tion of the plans prepared by Mr. Kennedy and Mr. St. George, and an interim report is shortly expected. The harbor commissioners, however, are not as anxious now to hurry the report, as the season is so far advanced that nothing can be done this year.

STRIKES.

Work has been so scarce during the last few weeks that we have heard nothing further regarding the threatened strike of the carpenters and painters, and judging from present prospects it is not likely we will have any serious labor troubles this year.

NOTES.

Some residents of Cote St. Antoine are endeavoring to agitate the question of annexation to the city of Montreal, but the matter has not taken definite shape yet.

The laying of the corner stone of the new Y. M. C. A. building on Dominion Square took place on Tuesday, the 10th inst., with the usual ceremonies.

The Grand Trunk has commenced the construction of the Wellington street subway under their contract which is being constructed at the joint expense of the city and railway for the convenience of vehicles and foot passengers. This is the initiative of getting rid of the deadly level crossings, and we hope in the near future to see them all abolished.

The Canadian Society of Civil Engineers have closed their fortnightly meetings for the season, the last one being held in McGill College. The Society's office is now transferred to their new rooms on the corner of St. Catherine and Mansfield streets, where the library and reading room will be kept open during the summer.



TASTE.

By W. H. ELLIOTT.

WHAT a bewildering vista of possibility is opened to the designer and colorist by the revolutions of modern machinery! The wonder is not that we see so much that is vulgar, but that the artist does not more often err with such a plethora of materials. This very condition has given birth to what may be called a false or sham taste, which eschews everything with positive qualities and exalts the negative attributes of namby-pambyism in whatsoever line it may appear. There is so much bad taste displayed on every hand under the paraded title of particularly good taste, one feels compelled at times to give utterance to protests which continually arise in the mind at the incorrect conception which may be said almost to prevail on this question. Men flatter themselves that they are building a house in the best taste, when its chief merit lies in the fact that like a barn, it has no points that challenge criticism. We see plenty of such houses around us. Women hunt for days to match a color in dressing, because it is such good taste to be dressed all in one color. The slight difference in shade or tint which they endeavor so assiduously to overcome may have been the only relief to the otherwise monotonous costume. People decorate their houses with the fear continually before their eyes that they may get some red or blue or yellow in their rooms and destroy their tasteful appearance. I wish to make a few observations on this last.

No doubt white walls are greatly to be preferred to ill-judged and ill-proportioned schemes of design or color. But to exalt the purely negative qualities of insipid greys, buffs, sages, and so on, above the richer tones which these merely shadow, is very much like singing the praises of well-watered wine. We are told sometimes with learned affectation, that you must use these washed-out tints in order to gain that very desirable repose in the treatment of walls and ceilings. What is repose? We speak of the erstwhile loud and angry sea sinking to repose. Do we speak of the repose of the shallow fluid never roused to action of any kind? There is a fascination in looking upon a lordly lion stretched in sleep in inaction, and for what reason? Simply that we see perfect strength and symmetry in repose, on which the eye rests with pleasure. Where is there a more restful sight than a glowing flower garden or a conservatory of rich exotics? Is there anything vulgar in it, or is it a display of bad taste? How soon may we expect this era of false æstheticism to pass away?

But, says one, where will you always get the controlling hand which shall ensure good taste in the use of more positive design or color? This I am not writing about, but would reply,

nowhere so long as we tie ourselves down to insipidity and namby-pambyism. No man ever learned to swim by keeping away from water. I had rather see an error on the side of loudness than the weak productions of an invertebrate timidity, and the errors need not be serious at any time. The very joy of using the stronger materials will guide the intelligent designer into safer paths.

But I did not propose to enter on this question, but rather to protest against the popular condemnation of all strong designing and coloring on the score of bad taste. I have seen people educated in other ways hold up their hands in horror at what was probably an exquisite composition in colour by an artist of world-wide celebrity. It is too much perhaps to ask such people to think for themselves, because in these matters they have probably very little basis for thought, but we may surely ask a practical admission that the highest taste may be displayed in the use of the strongest materials, and that true repose cannot be obtained where there is no latent strength.

THE RECENT EXHIBIT OF THE TORONTO ART STUDENTS' LEAGUE.

THIS Society, numbering a few rising young architects among its members, and in which, for that and other fraternal reasons, architects naturally take a friendly interest, showed by its last exhibition its increased and increasing vitality. Along with its vigorous young companion, the Toronto Architectural Sketch Club, it promises to have a considerable share in bringing about the future happy destiny of Toronto as an art centre. The apathy of the general public in all art matters that almost forced such societies into existence, was a disguised blessing. If we may judge by the reaction which in the direction of art culture has evidently set in, the effect on public taste of such exhibitions cannot be doubted. Of course it is easy to be optimistic, and it does not follow that because the germ planted amid the cutting winds of neglect has really sprouted and bids fair to become a healthy plant, its final growth is assured. Unlike the Canadian Academy and Ontario Society of Artists, whose more recent exhibit is of so advanced a character of excellence, it has to prove its right by intrinsic value to a permanent place among the art institutions of the country. But as yet there are scarcely any other signs than those favorable to future prosperity.

Many recent press notices seem to us to have failed in estimating the educational value of the training given to the junior and rising members. Composed as the League is of all degrees of proficiency, from the well-known veterans, most of them members of other societies, to youths just advanced from a rudimentary style—yet all students—it stands to reason that the work of such men as Cruickshank, Blatchly, Bengough, Manly and Thompson (the president), must bear salutary fruit in the younger members working with them.

Without intending any reflection on these and some other senior members not named, the League is to be specially congratulated we think on the high class of talent displayed by a section of its junior members. It is almost invidious to select names, yet we cannot refrain from pointing to the general work of Mr. C. Challoner, C. W. Jeffries and H. M. Hidu.

The inclusion of lady students a year ago was an anxious experiment, but any impartial critic must now pronounce it an assured success. A portion of the fair sex have shown their capability in work quite up to the average of their brother students, and in the front rank of them it would be unfair to omit mention of Miss Jopling, Miss Nankin, Miss Palin and Miss Macklin. Almost all the lady students could thus claim honorable mention.

Diversified studies disclose varying powers, and those not quite to the front in the general line of work, *z. e.*, the study of the draped human figure of both sexes, still work hopefully and steadily on, in a true fraternal spirit.

Altogether, this last show of winter work gives the amplest assurance that a true art spirit is being fostered, and progress is being made towards establishing a permanent abiding place for art in this city. The Toronto Art Students League will certainly assist materially this object, and be other art influences what they may, give a good account of itself.

SANITATION NEARLY

HOUSE DRAINS.

NOW that the rush of new inventions, and the introduction of new schemes for the treatment of drains, and the arrangement of general sanitary work has somewhat abated, says the *Decorators' Gazette Plumber and Gasfitters' Review*, we have a better opportunity of gathering up and sorting out the best ideas from the many which of late years have been continually brought into public notice. And although house sanitation is now being looked upon more as an exact science than it was a few years ago, when the whole thing was but a wide field for experiment, yet there are several details upon which there exists considerable difference of opinion.

With regard to the principles upon which drainage and plumbing work is arranged there seems to be among those who have had a fair amount of experience in these matters a common ground of agreement. But the most debatable subject and at the same time one of the most important, is, undoubtedly, the question of materials. That a house drain should be disconnected and provided with efficient ventilation, is generally admitted, but when it is asked of what material shall it be constructed, it is difficult sometimes to come to a decision. As a rule the dispute is between the advocates of stoneware pipes, and those who are in favor of iron. It is contended on the one hand that the modern glazed stoneware pipes are the most durable, in fact, practically indestructible, because the acids in the sewage have little, if any, deleterious effect upon such an impervious material. Then, as regards the jointing, it is said that by the aid of certain patent methods the joints can be made in such a manner as to be absolutely reliable, even if the pipes are moved after the joints are made. Such an event, however, should, in our opinion, be strictly guarded against under any circumstances, and especially if the drain passes under the house. Those who are convinced that iron drains should be used when they have to be placed in the basement of a dwelling-house, claim that a metallic pipe can be laid and jointed much more securely, and subjected to a far greater pressure for the purpose of testing its soundness, than earthenware drains can withstand. It is also contended that iron pipes can be fixed in much longer lengths, therefore fewer joints are necessary, and owing to the greater strength of the metal, any subsequent movement of the earth surrounding the pipe will not interfere with the rigid character of a drain of this kind. As to the durability of iron drains, many hold that if the pipes are coated in a proper manner with a bituminous solution while they are hot, a protecting surface is formed which is very durable. And, according to some accounts, after pipes of this kind have been in use for several years, the coating is found to be in a satisfactory condition. It would, however, be very unreasonable to suppose that an iron drain would wear so long as one constructed of glazed stoneware. Each of the materials, therefore, have their advantages as well as disadvantages, which fact seems to point to one conclusion, and that is, that all drains no matter of what materials they are formed, should be fixed in such a manner as to be easily accessible at any time. And that whether they are constructed of iron or stoneware or any other material, they should be treated as a soil or waste-pipe which are generally placed in positions where they can be examined from time to time.

In our opinion, drains should not be buried either in earth or even concrete, but should be placed in ventilated channels or subways large enough to allow for periodical inspection, while a test of some kind is being applied.

Under such conditions as these, the kind of materials used can be a secondary consideration, but where a sound rigid foundation can be obtained there can be no doubt that a stoneware drain will give much satisfaction.

The largest system of hot water heating in use, says the *Winnipeg Commercial*, is believed to be that in the McIntyre block, Winnipeg, containing 600,000 cubic feet to be heated. The system uses four Plaxton boilers, which supply 28,000 feet of pipe in coils.

MANUFACTURES AND MATERIALS

BRITISH COLUMBIA MARBLE.

AT Rudge's marble works, Victoria, two fine specimens—the one of excellent sandstone, the other of pure white marble—are at present attracting the admiration of all interested in mineralogy, says the Victoria B. C., *Colonist*. The sandstone, which is of remarkably good color and grain, was recently discovered to exist in immense quantity on Addington Island, near Alert Bay. The samples brought down are of a fine, gradation stone, which cuts, saws or bores well, and which will stand fire better than any known fire brick. This last mentioned quality renders it especially adapted for furnace building, while it can also be used to splendid advantage by builders and in monumental work.

Addington Island, where the quarries are located, contains about one hundred acres of the sandstone. Messrs. Howson and Rudge are the owners of the valuable find, and their intention is to develop it at once. It is pronounced of harder, closer grain than the Vermont production, and is said to be comparable only with Italian. It cuts well and takes an unsurpassed polish, while its stolidity ensures its durability. Of the full extent of the supply which is contained in the mountain at Knight's Inlet, little is known. The deposit appears inexhaustible—at any rate, there is enough to last the Pacific coast for centuries. Rutland marble now monopolizes the trade of America, but the owners of the Knight's Inlet mine expect to

compete successfully with the Vermonters, having a better article, which they will be able to sell just as cheaply. It is anticipated that the new marble will take the place of all imported material here at once, and that the trade that will be opened up by its exportation to the United States will constitute another important and profitable industry for British Columbia.

An effort is to be made to at once form a company at Kingston, Ont., to manufacture Portland cement.

A company is being formed in St. Thomas to manufacture water pipes. They will attempt to supply the material required for the new water works.

The Sicily Asphaltum Paving Company, with headquarters at Montreal, are seeking incorporation with a capital stock of \$30,000 for establishing works for the preparation of asphaltum for paving streets, roads, etc.

A convention of the International Association of Adamant wall plaster manufacturers was held at the Leland Hotel, Syracuse, N. Y., on June 10th and 11th. All matters affecting the trade were fully discussed, and a pleasant and profitable time was spent. Messrs. W. J. Hynes, Manager, and W. B. Cherry, Secretary-Treasurer of the Canadian company, were present and took part in the proceedings.

The Golden State Quarry Company, recently organized in British Columbia, are the owners of an extensive slate deposit near Kicking Horse River. There is now a surface of slate uncovered 30 x 500 feet, and the ledge runs into a mountain about 300 feet in height. The company intends to make roofing, slate copings for walls, window sills, cornices, brackets, chimney pieces, street flagging, etc. The quality of the slate is said to be first-class.

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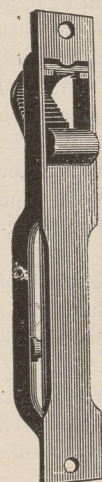
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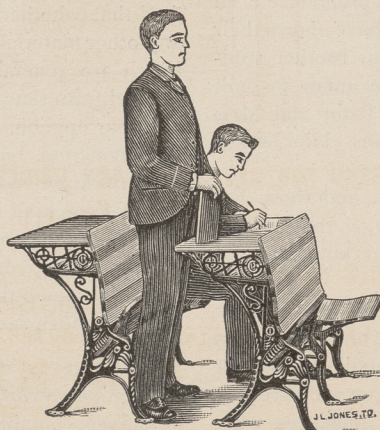
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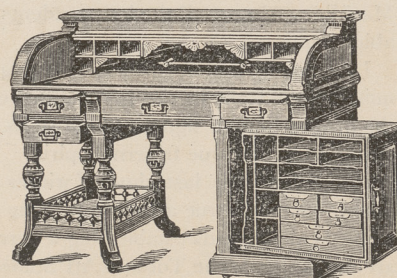
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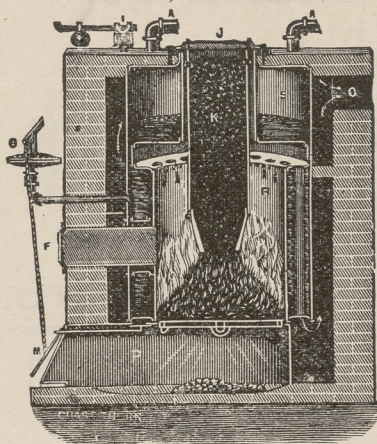
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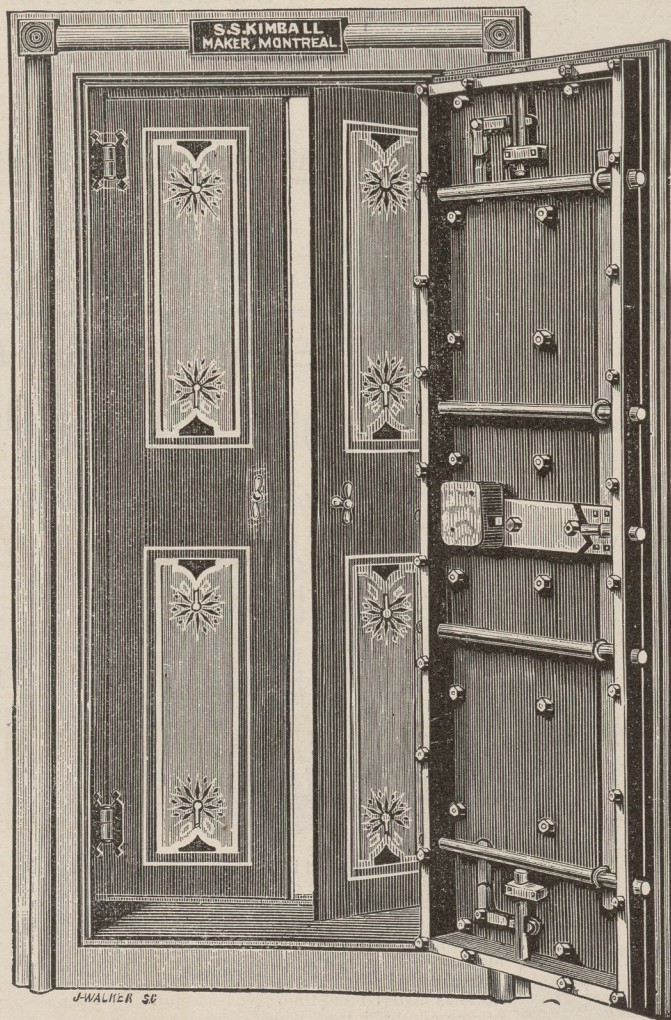
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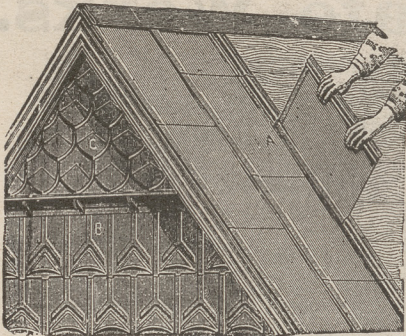
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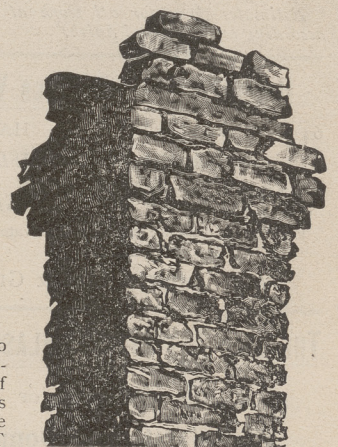
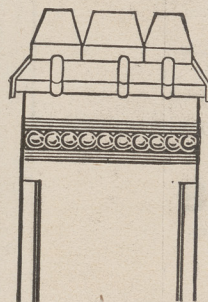
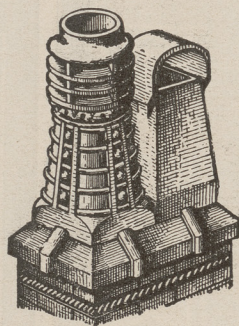
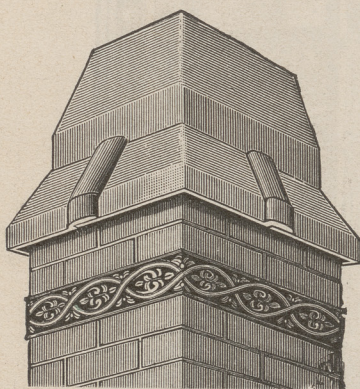
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